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Substitute for form 1449/PTO

**(Use as many sheets as necessary)**

Sheet	1	of	2
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**Complete if Known**

Application Number	10/719,903
Filing Date	November 21, 2003
First Named Inventor	John Santhoff et al.
Art Unit	2681
Examiner Name	to be assigned
Attorney Docket Number	051-15

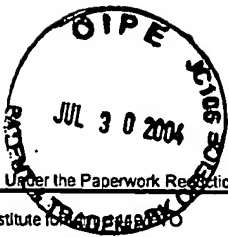
## U. S. PATENT DOCUMENTS

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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PTO/SB/08B (08-03)

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Substitute for PTO Form 4480

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

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Filing Date	November 21, 2003
First Named Inventor	John Santhoff et al.
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Examiner Name	to be assigned
Attorney Docket Number	051-15

Sheet	2	of	2
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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
n/0		5. NOAM GERI, Hybrid Coax-Wireless Multimedia Home Networks Using 802.11 Technology, Texas Instruments, White Paper, March 2003, 7 pages.	

Examiner Signature	<i>nguyen/b</i>	Date Considered	7/5/2005
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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
Sheet	1	of	4	Application Number	To be assigned
				Filing Date	November 21, 2003
				First Named Inventor	John H. SANTHOFF et al.
				Art Unit	To be assigned
				Examiner Name	To be assigned
				Attorney Docket Number	30287-15

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.†	Document Number Number - Kind Code² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
NYO		US- 3,678,204	07/18/1972	HARMUTH	
		US- 3,728,632	04/17/1973	ROSS	
		US- 4,447,747	05/08/1984	LAPOTIN	
		US- 4,641,317	02/03/1987	FULLERTON	
		US- 4,782,324	11/01/1988	UNDERWOOD	
		US- 4,979,186	12/18/1990	FULLERTON	
		US- 5,115,409	05/19/1992	STEPP	
		US- 5,146,616	09/08/1992	TANG ET AL.	
		US- 5,157,559	10/20/1992	GLEASON ET AL.	
		US- 5,362,108	11/08/1994	FULLERTON	
		US- 5,515,014	05/07/1996	TROUTMAN	
		US- 5,574,755	11/12/1996	PERSICO	
		US- 5,587,687	12/24/1996	ADAMS	
		US- 5,635,863	06/03/1997	PRICE, JR.	
		US- 5,677,927	10/14/1997	FULLERTON ET AL.	
		US- 5,687,169	11/11/1997	FULLERTON	
		US- 5,687,200	11/11/1997	BERGER	
		US- 5,708,377	01/13/1998	BRADLEY	
		US- 5,714,954	02/03/1998	CHUNG ET AL.	
NYO		US- 5,768,700	06/16/1998	KARDONTCHIK	

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Examiner Signature	<i>[Signature]</i>	Date Considered	7/5/2005
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	To be assigned
		Filing Date	November 21, 2003
		First Named Inventor	John H. SANTHOFF et al.
		Art Unit	To be assigned
		Examiner Name	To be assigned
Sheet 2	of 4	Attorney Docket Number	30287-15

U.S. PATENT DOCUMENTS					
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		Number - Kind Code <sup>2</sup> (if known)			
nfo		US- 5,847,623	12/08/1998	HADJICHRISTOS	
		US- 5,872,446	02/16/1999	CRANFORD, JR. ET AL.	
		US- 5,900,747	05/04/1999	BRAUNS	
		US- 5,986,501	11/16/1999	RAFATI ET AL.	
		US- 6,026,125	02/15/2000	LARRICK, JR. ET AL.	
		US- 6,031,862	02/29/2000	FULLERTON ET AL.	
		US- 6,043,943	03/28/2000	REZZI ET AL.	
		US- 6,054,889	04/25/2000	KOBAYASHI	
		US- 6,061,551	05/09/2000	SORRELLS ET AL.	
		US- 6,078,277	06/20/2000	CHENG ET AL.	
		US- 6,087,871	07/11/2000	KARDO-SYSSOEV ET AL.	
		US- 6,118,339	09/12/2000	GENTZLER ET AL.	
		US- 6,178,217 B1	01/23/2001	DEFRIES ET AL.	
		US- 6,281,822 B1	08/28/2001	PARK	
		US- 6,351,652 B1	02/26/2002	FINN ET AL.	
		US- 6,356,224 B1	03/12/2002	WOHLFARTH	
		US- 6,433,720 B1	08/13/2002	LIBOVE ET AL.	
		US- 6,539,213 B1	03/25/2003	RICHARDS ET AL.	
		US- 6,580,902 B1	06/17/2003	SORRELLS ET AL.	
		US- 2001/0019313A1	09/02/2001	TAKAHASHI ET AL.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials <sup>*</sup>	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				

Examiner Signature	<i>nguyenlo</i>	Date Considered	7/5/2005
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)		Application Number	To be assigned
		Filing Date	November 21, 2003
		First Named Inventor	John H. SANTHOFF et al.
		Art Unit	To be assigned
		Examiner Name	To be assigned
Sheet 3	of 4	Attorney Docket Number	30287-15

U.S. PATENT DOCUMENTS					
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
2/10		US- 2003/0048212A1	03/13/2003	Libove et al.	
2/10		US- 2003/0161382 A1	08/28/2003	Hershey et al.	
2/10		US- 5,793,413	08/11/1998	Hyllon et al.	
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FOREIGN PATENT DOCUMENTS						
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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				

Examiner Signature	<i>nguyennb</i>	Date Considered	7/5/2005
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	To be assigned
		Filing Date	November 21, 2003
		First Named Inventor	John H. SANTHOFF et al.
		Group Art Unit	To be assigned
		Examiner Name	To be assigned
Sheet 4 of 4	Attorney Docket Number	30287-15	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
2/10		FERNANDO RAMIREZ-MIRELES, "On Performance of Ultra Wideband Signals in Gaussian Noise and Dense Multipath," Paper 99C265, Accepted for Publication in the IEEE Transactions on Vehicular Technology, Pages 1-9.	
2/10		FERNANDO RAMIREZ-MIRELES et al., "N-Orthogonal Time-Shift-Modulated Codes for Impulse Radio," Communication Sciences Institute, Department of Electrical Engineering-Systems, University of Southern California, Los Angeles, CA 90089-2565 USA, Pages 1-4.	
2/10		HENNING F. HARMUTH, "Frequency-Sharing and Spread-Spectrum Transmission with Large Relative Bandwidth," IEEE Transactions on Electromagnetic Compatibility, Vol. EMC-20, No. 1, February 1978, Pages 232-239.	
2/10		HENNING F. HARMUTH, "Applications of Walsh functions in communications," IEEE Spectrum, November 1969, Pages 82-91.	
2/10		AETHER WIRE & LOCATION, INC., ROBERT FLEMING et al., "Integrated, Low-Power, Ultra-Wideband Transceivers for Distributed Position Location and Communication," Technical Abstracts of Proposal to Defense Advanced Research Projects Agency (DARPA), Part I - Technical Proposal, 1998, Pages 1-52.	
2/10		AETHER WIRE & LOCATION, INC., ROBERT FLEMING et al., "Low-Power, Miniature, Distributed Position Location and Communication Devices Using Ultra-Wideband, Nonsinusoidal Communication Technology," Semi-Annual Technical Report Prepared for: ARPA/FBI, July 1995, Pages 1-40.	

Examiner Signature	<i>nguyen</i>	Date Considered	7/5/2005
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